



MARYLAND GREEN BUILDING COUNCIL  
MEETING SUMMARY

DNR Tawes Office Building  
580 Taylor Ave., Room C1  
Annapolis, Maryland 21401  
Wednesday August 26, 2015

Attendees:

Prescott Gaylord – MDGBC  
Anja Caldwell – MDGBC  
Tom Liebel – MDGBC  
Lisa Ferretto – MDGBC  
Christine Varney – MDGBC  
Caroline Varney-Alvarado – DHCD

Mark Beck – USM  
Susan Gore – DBM  
Laura Armstrong – MDE  
Olivia Campbell – DNR  
Anne Raines – MDP  
Robert Kutner – DGS

Support:

Ellen Robertson – DGS  
Genevieve Savain – DGS  
Kelly Walker – DGS  
Tonya Zimmerman – DLS

Guests:

Neil Shade – Acoustical Design  
Karen Evans – Whiting-Turner  
James Ley – DGS

- I. Chairman Prescott Gaylord brought the meeting to order @ 10:00 AM.
- II. Prescott asked for a motion to approve the meeting summary from the July 22, 2015 meeting, no objections. Lisa said that she had a few comments that Bob incorporated and final version will be posted on the MDGBC website.
- III. Lisa Ferretto, AIA, LEED AP BD+C  
Presentation comparing IgCC to LEED  
While working with a recent client on a new school, they requested a comparison between IgCC and LEED, which led to this presentation.
  - A. The State of Maryland recently adopted the International Green Construction Code (IgCC) as an alternate path to meet the requirements of the Maryland High Performance Green Building Program.
    1. The IgCC is the first model code to include sustainability measures for entire construction projects and sites from design through construction, occupancy and beyond.

2. The IgCC provides Baseline Green Requirements which is a regulatory framework for new and existing buildings, establishing minimum green requirements.
  3. The IgCC acts as an overlay to the existing set of International Codes, including provisions of the International Energy Conservation Code and ICC-700, the National Green Building Standard, and incorporates ASHRAE Standard 189.1 as an alternate path to compliance.
- B. Lisa gave a brief history of the requirements for LEED and IgCC relative to the Maryland Green Building Council. There is a common goal to reduce negative impacts of the built environment on the natural environment.
1. LEED is a voluntary rating system. LEED 2009, also called LEED v3 is the current version of LEED. LEED v4 was scheduled to be required on June 27, 2015. The date has been extended to October 31, 2016.
  2. The 2012 IgCC is the current version of the International Green Construction Code approved in the State. This Code may be substituted for LEED under the State of Maryland High Performance Green Building Program.
  3. In July 2015, The International Code Council (ICC) announced that the IgCC will cease to be an independent building code and will merge with ASHRAE 189.1 for the 2018 version.
  4. The Maryland Green Building Council recently approved an amended version of the IgCC. This code supplement document can be found on the Department of General Services website under Green Building Laws and Regulations.
- C. Comparison
1. LEED v3 includes 10 mandatory LEED “Prerequisites” and a menu of optional LEED “Credits” selected by the designer to meet LEED Silver (54 minimum). The Maryland Green Building Program also requires the use of eight certain credits to comply. The required LEED credits are in the following categories:
    - a. Sustainable Sites (1)
    - b. Water Efficiency (2)
    - c. Energy and Atmosphere (1)
    - d. Materials and Resources (1)
    - e. Indoor Environmental Quality (3)
  2. IgCC 2012 – as a code, all requirements of the IgCC are mandatory. The Maryland program also requires a minimum of 10 IgCC “Electives” be met to comply. At least three of the electives must be in the Energy Conservation category.
- D. Questions and Comments
1. Tom Liebel asked if a project can get credit for 2 items in same category in LEED and can receive more points.  
Lisa said in LEED one cannot earn credit for more than one item in the same category.
  2. Prescott asked Lisa if after doing a comparison, which system she preferred.

Lisa prefers the current version of LEED over the IgCC since the credit system has flexibility and having worked with LEED for many years, there is a comfort level. IgCC is a new code that is not tested yet.

3. Prescott said that his firm is working with Baltimore City on projects requiring IgCC and they are very flexible in their enforcement as the code is so new. Baltimore City interprets existing buildings to mean any building, therefore IgCC is not required, just requiring metering.
4. Lisa said when LEED v4 takes effect in 2016, it will be more stringent than LEED v3. The IgCC and LEED v4 will become more equivalent and more interchangeable.
5. Lisa distributed a hard copy of her presentation and mentioned that the information may not be all inclusive.
6. Anja mentioned that LEED has training classes and asked if there is any training for IgCC yet. MD DHCD is doing training and Prescott said he would look into other sources of IgCC training.

For the complete presentation, see the attached document “IgCC – LEED’s Alternate Compliance Path, the International Green Construction Code”, dated August 26, 2015.

IV. Neil Thompson Shade, FASA, President of Acoustical Design Collaborative, Ltd., Towson, Maryland, provided a presentation comparing IgCC and LEED acoustic design criteria. Neil graduated with an undergraduate degree in Audio Technology and Acoustics from American University. His experience includes over 1000 projects with a concentration in auditoria and theaters, courthouses, education facilities, museums and worship houses.

A. Origins of Acoustic Criteria

1. The American National Standard Institute (ANSI) S12.60 Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools requires standards for acoustic criteria for background noise, reverberation and sound isolation. LEED & IgCC address these issues for schools.
  - a. Established in the early 2000’s, it was brought on by a law suit by parents of a child with a hearing impairment. They won the lawsuit and schools had to comply with new standards.
  - b. The requirements met with mixed reception as it was positive for advocates of the hearing impaired community, negative for industry and many school districts because of the higher costs of complying.
2. Around 2007 USGBC adopted a simplified version of ANSI S12.60 which applies only to schools.
3. The 2012 IgCC included acoustic design requirements for all buildings.

B. LEED Acoustic Standards

1. The current version of LEED acoustic requirements only cover schools
2. IEQ3 Prerequisite standard determines acceptable levels of sound in Core learning spaces for reverberation time and background (HVAC) noise levels.

3. IEQ9 Enhanced standard addresses additional requirements limiting noise in learning spaces.
- C. LEED v4
1. Will take effect October 2016 and will include more building types.
  2. School design criteria will be more restrictive to include reverberation criteria, noise levels, minimum requirements for exterior noise levels and interior sound isolation.
- D. IgCC Acoustics standard, Section 807
1. More comprehensive than LEED
  2. Addresses most building types
  3. Includes property line noise and structure borne noise
  4. Schools covered by ANSI S12.60
  5. References local codes and ordinances
  6. Buildings are assigned a category descriptor for design criteria
- E. Sound Isolation
1. IgCC addresses airborne and structure borne sound isolation. LEED does not address structure borne noise.
  2. Airborne sound isolation includes talking, televisions and stereo.
- F. Background (HVAC) noise
1. IgCC uses noise criterion (NC) metric, LEED uses A-weighting. NC is generally more stringent and is adopted by ASHRAE.
  2. Many space noise levels are too high.
- G. Property line noise emissions
1. IgCC assesses equipment noise disturbance, not addressed by LEED
  2. IgCC references local ordinances, supplements local ordinances for non-residential properties.
- H. Commissioning Testing
1. Not required by LEED
  2. Required by IgCC but deleted in the Maryland Green Building Council version of the IgCC for State buildings.
  3. Acoustics industry consensus is that testing is important to confirm design compliance.
- I. Comparing LEED and IgCC
1. Presently IgCC is more stringent than LEED for acoustic standards.
    - a. IgCC would provide better acoustic conditions for the public.
    - b. Likely to have resistance from industry due to costs for compliance.
  2. Differences with IgCC and LEED may be lessened with LEED v4.
- J. Questions and Comments
1. Prescott asked if old schools would meet acoustic requirements. Neil replied schools with plaster walls and schools with window air conditioner units would not meet acoustic requirements. Some schools with suspended ceilings might meet, not others.
  2. Lisa asked if we can make revisions in the 2015 Regulations to include testing.

3. Prescott asked if LEED or IgCC is easier to follow for acoustics. Neil said LEED is easier to comply with and IgCC items are not well thought out and had some errors, but most were picked up in the review process.
4. Neil mentioned that the IgCC acoustic requirements has a higher standard, but will cost much more. IgCC has been taken from building codes and has gone beyond LEED acoustic requirements.
5. Neil said when he worked in California, prior to a new building receiving a certificate of occupancy, a noise level test was mandatory and had to have acceptable levels.
6. Anja said Pennsylvania schools are less affluent and didn't meet acoustic requirements. Standards should be required for school districts to prevent noise levels unacceptable to students. Testing should be required.

#### V. Strategic Planning on Vision

Prescott asked the Council for feedback on ideas to implement the Council's "Vision Statement" which was developed earlier this year. The following comments came from the group:

1. Have the Council establish a relationship with the Sustainable Growth Commission.
2. Require all new or renovated building projects which receive State funding meet green building standards.
3. Connect the Capital Budget to the Operating Budget and include Life Cycle Analysis to be used for capital budget decision making.
4. Include leased office space in MDGBC scope and require green building standards in leases.
5. Involve the MDGBC with DGS energy efficiency program in development of projects.
6. Maryland should encourage 'Green Communities' mandates.
7. Anja asked if every state agency has a sustainability coordinator and if not, suggested there should be.
8. Olivia suggested that a push from top State government officials would help to incorporate strategic plan goals.
9. Prescott suggested that the next large State building be a Net Zero project.
10. Lisa said that Net Zero is typically incorporated in new buildings, but should ultimately include renovations and existing buildings as well as required testing and mandatory corrections to deficiencies.
11. Laura Armstrong suggested adding rental space to State building requirements, as her agency (MDE) typically rents their office space. Mark Beck said that would be a good way to encourage the private sector adoption of Green Building.
12. Anja suggested training sessions and educational seminars as well as requiring posting of energy used by State buildings.
13. A suggestion was made to reduce the 7,500 square foot minimum size building requirement to capture more buildings into the Green Building Program.

VI. Once around the table:

- A. Christine Varney announced her new position as Sustainability Coordinator in The Sheward Partnership, a Philadelphia and Baltimore Architectural firm.
- B. James Ley, the DGS Sustainability Coordinator announced that Barry Powell was recently named the Director of Energy in the Department of General Services.
- C. Someone asked if the revised High Performance Green Building Program is on the Department of General Services website. Yes it is and can be found under Green Building, Laws and Regulations.

The meeting was adjourned at 12:00 p.m. The next meeting is scheduled for October 28, 2015 in a location to be determined. The preceding is intended as a summary only of the discussions held on this meeting date. Council members are requested to review the summary and notify the writer of any errors, omissions or unintended misrepresentations of the discussion.